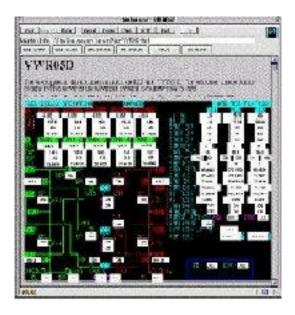


NASA Success Story

Internet Display of PCGOAL Real-time Data Using Java (JView)



NetLander, Inc. of Titusville, Florida is marketing a high-powered Web-based data distribution software system called JTouch. The company, a Florida/NASA Business Incubation Center tenant, signed a commercial license agreement with NASA at Kennedy Space Center to commercialize the JView technology, currently used by KSC Space Shuttle operations. NetLander is adapting the technology for use in commercial manufacturing, telemedicine, and finance. The Incubator company envisions JTouch as the basis for a near-real-time Internet remote monitoring product. With its modular design, engineering experts, for example, could use JTouch to see how systems are functioning and troubleshoot them in industrial plants around the globe from a single physical locale. Physicians and other health care professionals could use NetLander's product to monitor a patient's vital statistics from a hospital, clinic, or home to offer better and more cost-effective care. The product could also accommodate "live" reporting of stock quotes for brokers and investors.

NASA Involvement NASA-KSC developed the web-based near real-time monitoring system called JView to allow a user to access Space Shuttle and ground support equipment from any type of desktop computer running a Web browser. JView is one part of the new Space Shuttle Checkout and Launch Control System (CLCS). The technology's collection of computer programs facilitates the real-time display, via the Internet, of multiple steams of data from the Space Shuttle and supporting equipment. This eliminates the need for a dedicated PC to view data, significantly reduces the cost and effort to support viewing of real-time data, and opens up new avenues for viewing this data. JView is so named because it is written in the Java programming language and because the data to be displayed are first processed for distribution over the Internet by a program

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Internet Display of PCGOAL Real-time Data Using Java (JView) (Continued)

called PCGOAL, which runs on a server computer that receives the data streams from a common data buffer. PCGOAL is based on the Ground Operations Aerospace Language (GOAL). JView allows the CLCS user at a desktop computer running Web-browser software to connect to a data server computer, select a data stream, and activate plot-window displays. JView is expected to support the entire KSC user community, estimated at 800 users.

Social/Economic Benefit Potential benefits of NetLander's JTouch technology include improved patient care, improved distributed manufacturing information, and the creation of jobs in the local community. The user gains geographic independence through Java applets (client) and Java applications (server) that work locally or over the Internet, providing the flexibility to display information globally as required. There is less time spent on development and training. Utilizing a commercial off-the-shelf (COTS) Web browser client (display) shortens the software development process and minimizes implementation time and costs. Also, applications are written once to run anywhere, ensuring portability and architectural independence rather than obsolescence. The clients and servers may be run on almost any hardware or operating system from PC's to mainframes. Security is also easier. Policies for access and safe execution of Java applets are easily established. Administration and distribution of application updates are also easy to manage, since the latest applets are downloaded as needed from the server.

Industry Partner NetLander, Inc NASA Partner Kennedy Space Center

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